

A METHOD AND APPARATUS FOR SPATIALLY CONFINED ELECTROPORATION

ABSTRACT

5 The invention provides hollow-tip-electrodes for spatially localized delivery of
substances to one or more biological targets present in a population comprising target
and non-target molecules, macromolecules, and/or cells. The invention also provides
electrode plates for receiving one or more of such tips, tip-electrode plates comprising
electrode plates comprising one or more electrode tips, and systems comprising tip-
10 electrodes and containers for containing one or more biological targets, e.g., such as
molecules, macromolecules, and/or cells. The invention further provides methods for
using such systems and components thereof. In one preferred aspect, the systems are
used for spatially confined electroporation of cells and cell structures. The invention
facilitates high throughput screening of agents (e.g., such as drugs) that act on
15 intracellular targets.